

## General

### Guideline Title

Imatinib for the adjuvant treatment of gastrointestinal stromal tumours (review of NICE technology appraisal guidance 196).

### Bibliographic Source(s)

National Institute for Health and Care Excellence (NICE). Imatinib for the adjuvant treatment of gastrointestinal stromal tumours (review of NICE technology appraisal guidance 196). London (UK): National Institute for Health and Care Excellence (NICE); 2014 Nov. 50 p. (Technology appraisal guidance; no. 326).

### Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: National Institute for Health and Clinical Excellence (NICE). Imatinib for the adjuvant treatment of gastrointestinal stromal tumours. London (UK): National Institute for Health and Clinical Excellence (NICE); 2010 Aug. 45 p. (Technology appraisal guidance; no. 196).

This guideline meets NGC's 2013 (revised) inclusion criteria.

## Recommendations

### Major Recommendations

Imatinib is recommended as an option as adjuvant treatment for up to 3 years for adults who are at high risk of relapse after surgery for KIT (CD117)-positive gastrointestinal stromal tumours (GISTs), as defined by the Miettinen 2006 criteria\* (based on tumour size, location and mitotic rate).

People currently receiving treatment initiated within the National Health Service (NHS) with imatinib that is not recommended for them by the National Institute for Health and Care Excellence (NICE) in this guidance should be able to continue treatment until they and their NHS clinician consider it appropriate to stop.

\*Miettinen M, Lasota J (2006). Gastrointestinal stromal tumours: review on morphology, molecular pathology, prognosis, and differential diagnosis. Archives of Pathology & Laboratory Medicine 130:1466–78.

### Clinical Algorithm(s)

None provided

# Scope

## Disease/Condition(s)

Gastrointestinal stromal tumours (GISTs)

## Guideline Category

Assessment of Therapeutic Effectiveness

Treatment

## Clinical Specialty

Family Practice

Gastroenterology

Internal Medicine

Oncology

## Intended Users

Advanced Practice Nurses

Nurses

Physician Assistants

Physicians

## Guideline Objective(s)

To evaluate the clinical effectiveness and cost-effectiveness of imatinib for the adjuvant treatment of gastrointestinal stromal tumours (GISTs)

## Target Population

Adult patients who are at significant risk of relapse following resection of KIT (CD117)-positive gastrointestinal stromal tumours (GISTs)

## Interventions and Practices Considered

Imatinib

## Major Outcomes Considered

- Clinical effectiveness
  - Overall survival
  - Recurrence-free survival (progression-free survival)
  - Adverse events of treatment
  - Health-related quality of life
- Cost-effectiveness

# Methodology

## Methods Used to Collect/Select the Evidence

### Searches of Electronic Databases

## Description of Methods Used to Collect/Select the Evidence

Note from the National Guideline Clearinghouse (NGC): The National Institute for Health and Care Excellence (NICE) commissioned an independent academic centre to perform an assessment of the manufacturer's submission on the technology considered in this appraisal and prepare an Evidence Review Group (ERG) report. The ERG report for this technology appraisal was prepared by the Southampton Health Technology Assessment Centre (SHTAC), University of Southampton (see the "Availability of Companion Documents" field).

### Clinical Effectiveness

#### Description of Manufacturer's Search Strategy

The manufacturer's submission (MS) reports separate searches for studies of clinical effectiveness, cost effectiveness, health related quality of life (utility values) and resource use data. The MS search strategies are considered overall to be of a reasonable quality, employing the correct use of Boolean operators and set combinations, adapted per database. The databases chosen match the minimum criteria set by NICE (i.e., MEDLINE, MEDLINE In-Process, EMBASE, The Cochrane Library). There were some minor indexing and truncation issues in the searches and it was noted that some papers were indexed on MEDLINE as "Postoperative Period", which was not in the search strategy. However, on checking the relevant papers, these were included in the MS reference list.

In addition, there were a few minor inconsistencies between the clinical and cost/quality of life searches. For example, Science Citation Index and Conference Proceedings Index were used in the cost but not in the clinical searches. The approach in the clinical searches was to search specific conferences. MEDLINE and Ovid are not specified as host databases in the text for the clinical effectiveness searches, but Ovid is recorded for the cost searches. The clinical effectiveness searches show the return number of hits per line, which are absent in the cost-effectiveness and quality of life searches. Cost-effectiveness and quality of life filters have been applied within the one search linked to the disease terms. It would represent best practice to run these as separate searches for greater transparency, especially in absence of number of hits per line being documented, although the more pragmatic approach can be time effective. The search strategy appeared to be of reasonable quality.

Searches of electronic databases for clinical effectiveness studies were conducted until April 2013, and searches for conference proceedings were conducted up to June 2013. However, cost-effectiveness searches were conducted up to December 2013. The MS provided sufficient detail for a reproduction of their search methods (i.e., specified databases, dates of searches and search strategies). Given that the clinical effectiveness searches were not up to date, the ERG has therefore updated them to 18th February 2014 for electronic bibliographic databases and to 19th February 2014 for on-going trial searches.

The MS does not report a separate search to identify adverse drug reactions. This appears a reasonable approach as the ERG considers that adverse event search filters are of questionable value and that side effects are not always reported in abstracts on bibliographic databases. No search of grey literature or hand searching was reported.

The ERG conducted the clinical effectiveness update searches using a slightly adjusted strategy (on all years in all the databases) using a randomised controlled trial (RCT) filter (the original MS search was for RCTs and non-RCTs). Searches identified one additional phase II RCT reported in a conference abstract and a poster (see Table 2 in the ERG report). However, the data are likely to be of limited value to this appraisal as the trial compared 6 months with 12 months adjuvant imatinib for intermediate or high risk gastrointestinal stromal tumours (GISTs) patients RCT (evidence from longer treatment periods is available).

The interim analysis (median follow-up time of 33 months) showed that 6 months of adjuvant imatinib was inferior in efficacy to 12 months treatment in terms of recurrence free survival (RFS). It was concluded that shortening of the adjuvant imatinib duration is not recommended for intermediate or high risk GIST patients.

While no systematic search of trial databases was undertaken, the MS reported searching for relevant conferences, supplemented by an electronic review of ASCO (the American Society of Clinical Oncology) abstracts. The ERG elected to search the following: UK Clinical Research Network

(UKCRN), [clinicaltrials.gov](http://clinicaltrials.gov), [controlled-trials.com](http://controlled-trials.com), World Health Organization International Clinical Trials Registry Platform (WHO ICTRP), [cancer.gov/clinicaltrials](http://cancer.gov/clinicaltrials) and <http://www.cancerresearchuk.org/cancer-help/trials/> [redacted]. Searches conducted by the ERG did not identify any additional relevant new conference abstracts.

#### Statement of the Inclusion/Exclusion Criteria Used in the Study Selection

The MS states that the inclusion/exclusion criteria are detailed in the flow chart. While no criteria are specified in the flow chart, the information is provided in the appendices. The inclusion criteria are clearly stated and are based on patients with GIST (any risk) being treated with adjuvant imatinib, reporting recurrence-free (or equivalent) and overall survival in any prospective and retrospective study including case series. Excluded were sub-groups of GIST (e.g., rectal GIST), neoadjuvant imatinib and other tyrosine kinase inhibitors (TKIs), studies not specifically reporting data for adjuvant imatinib (e.g., reporting for neoadjuvant and/or adjuvant imatinib, or for with and without imatinib), studies reporting data for <20 patients receiving adjuvant imatinib, and studies reported in non-English language. No definition of risk was applied and risk was not limited to "significant risk" as per the scope.

No limits as to the quality of the RCTs were placed in the inclusion criteria. Setting was not used as inclusion criteria and does not appear to be a relevant factor.

A flow chart with the numbers of references included and excluded at each stage was presented, and appears to be correct. It is unclear why the electronic title and abstract screening was conducted twice. Clarification requested from the manufacturer states that the first round of screening focussed on the inclusion criteria and the second on the exclusion criteria. Findings from the first round of screening influenced the second round in that two extra items were added to the exclusion criteria: exclusion based on the number of patients and exclusion of GIST sub-groups. The MS did not provide a list of excluded studies and the ERG was unable to check whether any studies were excluded inappropriately. Following a clarification request, a reference list of the six studies was provided with reasons for their exclusion and the ERG concluded that the exclusions were appropriate. The ERG is not aware of any other potential bias in the selection of studies.

It should be noted that the screening of references was carried out by one researcher, with a random quality check of 30% of all articles selected by a second researcher, with a third researcher resolving any disputes. No justification for this approach was provided. Guidance for undertaking systematic reviews in health care recommends that all papers are independently assessed by more than one researcher, as this increases the reliability of the decision process.

#### Economic Evaluation

##### Manufacturer's Review of Published Economic Evaluations

A systematic search of the literature was conducted by the manufacturer to identify economic evaluations of treatments for GIST. The inclusion and exclusion criteria for the systematic review are listed in the MS. The inclusion criteria state that economic evaluations of adult patients with a GIST for adjuvant imatinib with surgical resection compared to surgical resection alone or adjuvant imatinib with surgical resection for a different time period would be included. Abstracts and non-English language studies were excluded.

## Number of Source Documents

### Clinical Effectiveness

The manufacturer's systematic review identified 3 randomised controlled trials (RCT) and 12 non-randomised trials.

### Economic Evaluation

- Nine studies were identified from screening 642 titles and abstracts. Of these seven studies were excluded, mainly as they were not a full paper or were not an economic evaluation. Two studies were included for full review.
- The manufacturer presented an economic model.

## Methods Used to Assess the Quality and Strength of the Evidence

### Expert Consensus

## Rating Scheme for the Strength of the Evidence

Not applicable

## Methods Used to Analyze the Evidence

Systematic Review with Evidence Tables

## Description of the Methods Used to Analyze the Evidence

Note from the National Guideline Clearinghouse (NGC): The National Institute for Health and Care Excellence (NICE) commissioned an independent academic centre to perform an assessment of the manufacturer's submission on the technology considered in this appraisal and prepare an Evidence Review Group (ERG) report. The ERG report for this technology appraisal was prepared by Southampton Health Technology Assessment Centre (SHTAC), University of Southampton (see the "Availability of Companion Documents" field).

### Clinical Effectiveness

#### Description and Critique of the Approach to Validity Assessment

The manufacturer's submission (MS) quality assessed all studies including the non-randomised trials following Centre for Reviews and Dissemination (CRD) criteria. A summary of the quality assessment for the included randomised controlled trials (RCTs) is presented in the MS.

The ERG repeated the quality assessment of the RCTs. The manufacturer's quality assessment was based on criteria specified by NICE (see Table 4 in the ERG report). There were some differences between the quality assessment judgements of the MS and the ERG.

#### Description and Critique of Manufacturer's Outcome Selection

The MS indicated that all outcomes stated in the scope (overall survival [OS], recurrence-free survival [RFS], adverse effects [AEs] of treatment and health related quality of life [HRQoL]) are covered, however no data for HRQoL were collected by the three included RCTs.

The MS appears to report all relevant trial outcomes. In the American College of Surgeons Oncology group (ACOSOG) Z9001 trial, RFS was defined as "the time from patient registration to the development of tumour recurrence or death from any cause" and OS as "the time from patient registration to death from any cause." RFS in the Scandinavian Sarcoma Group and the Sarcoma Group of the Arbeitsgemeinschaft Internistische Onkologie (SSGXVIII/AIO) trial was defined as "the time period from the date of randomisation to the earliest date of recurrence (first date at which the physician suspected gastrointestinal stromal tumour [GIST] recurrence leading to cytological or histological confirmation or radiological evidence of recurred GIST) or death from any cause". OS was defined as "the time period from the randomisation date to death from any cause plus 1 day, was a secondary endpoint". The European Organisation for Research and Treatment of Cancer (EORTC) 62024 trial reports OS, RFS and the outcome 'imatinib failure-free survival' (IFS), where failure was defined as the time at which patients had to be changed to treatment with a different tyrosine kinase inhibitor owing to disease relapse or recurrence. The trial investigators describe this as a new end-point for the adjuvant setting and it was designed to incorporate secondary resistance. The manufacturer notes that this is not a generally recognised end-point and has not been included in other studies of adjuvant GIST. The ERG notes that, while this was not used in the other RCTs of adjuvant treatment in the submission, a similar endpoint has been used in an RCT of patients with controlled advanced GIST to assess the effects of interrupted or continuous imatinib treatment. In that trial the (secondary) outcome was 'time to imatinib resistance', calculated from the date of random assignment to the date of progression under imatinib 400 mg/day or date of last follow-up. The ERG clinical advisor suggested that an outcome such as IFS is more relevant than RFS in the adjuvant treatment setting as imatinib is more likely to suppress rather than eradicate residual disease in patients with GIST - therefore it is more likely that it will delay rather than prevent recurrence. The advisor also noted that there are concerns about accelerated development of secondary resistance in patients receiving adjuvant imatinib. Therefore outcomes that specifically take into account resistance in the adjuvant setting are relevant.

#### Description and Critique of the Manufacturer's Approach to Trial Statistics

All three trials were powered statistically for their primary outcomes. In two of the trials the original primary outcome was OS, but in both cases this was changed (subject to approval from authorities) to outcomes that reflected time to recurrence during the trials due to prognostic improvement in survival in GIST patients noted from other studies. The trials used Cox proportional hazards regression models to estimate treatment effects, and satisfactorily tested the proportionality assumption. Intention-to-treat (ITT) analysis, using appropriate methods, was performed in the ACOSOG Z9001 and SSGXVIII/AIO trials. The latter trial also reported an efficacy analysis. The EORTC trial is currently only available as a planned interim analysis at a median follow-up of 4.7 years, whereas the other two trials have fully published primary analyses and long-term follow-up results in the MS.

Treatment effect estimates (RFS and OS) for high risk patients in the MS are based on retrospectively classified sub-population analyses, varying in size, and are most likely underpowered. However, as reported in Section 3.3 in the ERG report, results for RFS and OS were not significantly different between the full trial population and the high risk sub-populations (confidence intervals did not cross 1).

The 5-year follow-up analysis of the ACOSOG Z9001 trial is confounded by the majority of the placebo patients who were recurrence-free at the time of study unblinding opting to cross-over to active treatment for 1-year. A number of statistical methods to account for patient cross-over in survival analyses are proposed in a supplemental report. All have advantages and disadvantages and no single approach has overall strengths, though the Inverse Probability of Censoring Weights (IPCW) method is favoured by the manufacturer, with caveats. These estimates (which are slightly more favourable to imatinib) are not currently reflected in the manufacturer's cost-effectiveness analyses. The ERG considers that inclusion of HRs that adjust for patient cross-over will likely lower the incremental cost-effectiveness ratios (ICERs) for adjuvant imatinib.

#### Description and Critique of the Manufacturer's Approach to the Evidence Synthesis

A narrative synthesis is provided with results reported in tables, text, and Kaplan-Meier plots.

Meta-analysis was not performed though an indirect comparison of the ACOSOG Z9001 and SSGXVIII/AIO trials was conducted, to inform the economic analysis. It should be noted that according to the manufacturer, the indirect comparison does not follow standard statistical methods as its only purpose was to populate the economic model.

Refer to Section 3 in the ERG report for additional information on clinical effectiveness.

#### Economic Evaluation

The manufacturer's cost-effectiveness analysis (CEA) uses a Markov model to estimate the cost-effectiveness of adjuvant treatment with imatinib compared with no treatment in adult patients with GIST treated with surgical resection. The model adopted a lifetime horizon, with a monthly cycle length. Discount rates of 3.5% were applied to both benefits and costs. The model consists of nine health states. Patients can remain recurrence-free, have a recurrent GIST (first or second recurrence), and have progressive disease or die (from GIST or other causes).

The probability of disease recurrence was estimated from clinical-effectiveness data from the published pivotal phase III trials of adjuvant imatinib (ACOSOG Z9001 and SSGXVII/AIO). The treatment effect was estimated for two distinct periods: the period patients received adjuvant imatinib ("on treatment" period) and the period immediately after cessation of adjuvant imatinib ("off-treatment" period).

Quality of life is captured by utility values, which are assigned for patients in different phases of disease according to health state. Utility weights used in the economic model were identified through a systematic review of the literature, as no quality of life data were collected from the clinical trials.

Refer to Section 4 in the ERG report for additional information on the economic analysis.

## Methods Used to Formulate the Recommendations

### Expert Consensus

## Description of Methods Used to Formulate the Recommendations

### Considerations

Technology appraisal recommendations are based on a review of clinical and economic evidence.

### Technology Appraisal Process

The National Institute for Health and Care Excellence (NICE) invites 'consultee' and 'commentator' organisations to take part in the appraisal process. Consultee organisations include national groups representing patients and carers, the bodies representing health professionals, and the manufacturers of the technology under review. Consultees are invited to submit evidence during the appraisal and to comment on the appraisal documents.

Commentator organisations include manufacturers of the products with which the technology is being compared, the National Health Service (NHS) Quality Improvement Scotland and research groups working in the area. They can comment on the evidence and other documents but are not asked to submit evidence themselves.

NICE then commissions an independent academic centre to review published evidence on the technology and prepare an 'assessment report'. Consultees and commentators are invited to comment on the report. The assessment report and the comments on it are then drawn together in a document called the evaluation report.

An independent Appraisal Committee then considers the evaluation report. It holds a meeting where it hears direct, spoken evidence from nominated clinical experts, patients and carers. The Committee uses all the evidence to make its first recommendations, in a document called the 'appraisal consultation document' (ACD). NICE sends all the consultees and commentators a copy of this document and posts it on the NICE website. Further comments are invited from everyone taking part.

When the Committee meets again it considers any comments submitted on the ACD; then it prepares its final recommendations in a document called the 'final appraisal determination' (FAD). This is submitted to NICE for approval.

Consultees have a chance to appeal against the final recommendations in the FAD. If there are no appeals, the final recommendations become the basis of the guidance that NICE issues.

Who Is on the Appraisal Committee?

NICE technology appraisal recommendations are prepared by an independent committee. This includes health professionals working in the NHS and people who are familiar with the issues affecting patients and carers. Although the Appraisal Committee seeks the views of organisations representing health professionals, patients, carers, manufacturers and government, its advice is independent of any vested interests.

## Rating Scheme for the Strength of the Recommendations

Not applicable

## Cost Analysis

### Summary of Appraisal Committee's Key Conclusions

#### Availability and Nature of Evidence

The Committee concluded that the structure of the company's economic model was acceptable for assessing the cost-effectiveness of adjuvant imatinib.

#### Uncertainties Around and Plausibility of Assumptions and Inputs in the Economic Model

The Committee discussed how the company had incorporated the relative treatment effect into its economic model and accepted the company's assumption that imatinib's treatment effect was different during treatment compared with after treatment. The Committee concluded that the on-treatment and off-treatment hazard ratios were sufficiently robust for generating cost-effectiveness estimates.

#### Incorporation of Health-related Quality-of-Life Benefits and Utility Values. Have Any Potential Significant and Substantial Health-related Benefits Been Identified That Were Not Included in the Economic Model, and How Have They Been Considered?

The Committee concluded that there were no additional health benefits that had not been included in the company's economic model.

#### Are There Specific Groups of People for Whom the Technology Is Particularly Cost Effective?

Not applicable.

#### What Are the Key Drivers of Cost-effectiveness?

The Committee concluded that there was some uncertainty in using the Gompertz model for the long-term extrapolation of imatinib's treatment benefit, and that this could cause the cost-effectiveness estimates generated using the company's model to be too optimistic.

#### Most Likely Cost-effectiveness Estimate (Given as an Incremental Cost-effectiveness Ratio [ICER])

The Committee concluded that the true value of the ICERs was between £3610 and £12,100 per quality-adjusted life year (QALY) gained for 1-year adjuvant imatinib compared with no adjuvant treatment, and between £16,700 and £30,000 per QALY gained for 3-year adjuvant imatinib compared with 1-year adjuvant imatinib.

How Has the New Cost-effectiveness Evidence That Has Emerged Since the Original Appraisal (TA196) Influenced the Current (Preliminary) Recommendations?

The Committee noted that NICE technology appraisal guidance 196 had not recommended imatinib for the adjuvant treatment of gastrointestinal stromal tumours (GISTs) and recalled that the original appraisal had concluded that the data were too immature to inform conclusions about imatinib's clinical effectiveness.

Having discussed the clinical-effectiveness evidence in the company's current submission, which contained analyses with median follow-up of 4 to 5 years for outcomes including overall survival, it concluded that the evidence was suitable for decision-making. The Committee discussed how the company had incorporated the clinical data in its economic model and accepted the company's estimates of baseline risk of recurrence, on-treatment hazard ratio and off-treatment hazard ratio.

After a step-by-step examination of the company's economic model, the Committee recommended adjuvant treatment with imatinib for up to 3 years as an option for KIT (CD117)-positive GISTs in people considered at high risk of recurrence as defined by the Miettinen criteria.

## Method of Guideline Validation

External Peer Review

## Description of Method of Guideline Validation

Consultee organisations from the following groups were invited to comment on the draft scope, Assessment Report and the Appraisal Consultation Document (ACD) and were provided with the opportunity to appeal against the Final Appraisal Determination.

- Manufacturer/sponsors
- Professional/specialist and patient/carer groups
- Commentator organisations (without the right of appeal)

In addition, individuals selected from clinical expert and patient advocate nominations from the professional/specialist and patient/carer groups were also invited to comment on the ACD.

## Evidence Supporting the Recommendations

### Type of Evidence Supporting the Recommendations

The type of evidence supporting the recommendations is not specifically stated.

The Appraisal Committee considered clinical and cost-effectiveness evidence submitted by the manufacturer of imatinib and reviews of these submissions by the Evidence Review Group (ERG). The main clinical effectiveness evidence came from three randomised controlled trials. For cost-effectiveness, the Committee considered an economic model submitted by the manufacturer.

## Benefits/Harms of Implementing the Guideline Recommendations

### Potential Benefits

Imatinib is a selective kinase inhibitor which binds to activated c-KIT receptors and blocks the cell signalling pathway, preventing uncontrolled cell proliferation.

Although the Committee believed that the introduction of adjuvant treatment for gastrointestinal stromal tumours (GISTs) could potentially be considered a step change in health-related benefits, it noted that imatinib has been available as a treatment for GISTs for many years and consequently the move to adjuvant treatment could not be considered innovative.



## Potential Harms

The summary of product characteristics lists the following adverse reactions for imatinib: gastrointestinal effects, oedema, rash, and neutropenia.

For full details of adverse reactions and contraindications, see the summary of product characteristics.

## Contraindications

### Contraindications

For full details of adverse reactions and contraindications, see the summary of product characteristics.

## Qualifying Statements

### Qualifying Statements

- This guidance represents the views of the National Institute for Health and Care Excellence (NICE), which was arrived at after careful consideration of the available evidence. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. However, the guidance does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.
- Implementation of this guidance is the responsibility of local commissioners and/or providers. Commissioners and providers are reminded that it is their responsibility to implement the guidance, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations. Nothing in this guidance should be interpreted in a way which would be inconsistent with compliance with those duties.

## Implementation of the Guideline

### Description of Implementation Strategy

- Section 7(6) of the [National Institute for Health and Care Excellence \(Constitution and Functions\) and the Health and Social Care Information Centre \(Functions\) Regulations 2013](#)  requires clinical commissioning groups, National Health Service (NHS) England and, with respect to their public health functions, local authorities to comply with the recommendations in this appraisal within 3 months of its date of publication.
- When NICE recommends a treatment 'as an option', the NHS must make sure it is available within the period set out in the paragraph above. This means that, if a patient has a gastrointestinal stromal tumour and the doctor responsible for their care thinks that adjuvant imatinib is the right treatment, it should be available for use, in line with NICE's recommendations.
- NICE has developed a costing template (see the "Availability of Companion Documents" field) to estimate the national and local savings and costs associated with implementation to help organisations put this guidance into practice.

## Implementation Tools

Foreign Language Translations

Patient Resources

Resources

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

# Institute of Medicine (IOM) National Healthcare Quality Report Categories

## IOM Care Need

Living with Illness

## IOM Domain

Effectiveness

Patient-centeredness

## Identifying Information and Availability

### Bibliographic Source(s)

National Institute for Health and Care Excellence (NICE). Imatinib for the adjuvant treatment of gastrointestinal stromal tumours (review of NICE technology appraisal guidance 196). London (UK): National Institute for Health and Care Excellence (NICE); 2014 Nov. 50 p. (Technology appraisal guidance; no. 326).

### Adaptation

Not applicable: The guideline was not adapted from another source.

### Date Released

2010 Aug (revised 2014 Nov)

### Guideline Developer(s)

National Institute for Health and Care Excellence (NICE) - National Government Agency [Non-U.S.]

### Source(s) of Funding

National Institute for Health and Care Excellence (NICE)

### Guideline Committee

Appraisal Committee

### Composition of Group That Authored the Guideline

*Appraisal Committee Members:* Professor Andrew Stevens (*Chair of Appraisal Committee C*), Professor of Public Health, University of Birmingham; Professor Eugene Milne (*Vice Chair of Appraisal Committee C*), Director of Public Health, City of Newcastle upon Tyne; Professor Kathryn Abel, Director of Centre for Women's Mental Health, University of Manchester; David Chandler, Lay member; Gail Coster,

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## Financial Disclosures/Conflicts of Interest

Committee members are asked to declare any interests in the technology to be appraised. If it is considered there is a conflict of interest, the member is excluded from participating further in that appraisal.

## Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: National Institute for Health and Clinical Excellence (NICE). Imatinib for the adjuvant treatment of gastrointestinal stromal tumours. London (UK): National Institute for Health and Clinical Excellence (NICE); 2010 Aug. 45 p. (Technology appraisal guidance; no. 196).

This guideline meets NGC's 2013 (revised) inclusion criteria.

## Guideline Availability

Electronic copies: Available from the [National Institute for Health and Care Excellence \(NICE\) Web site](#) .

## Availability of Companion Documents

The following are available:

- Imatinib for the adjuvant treatment of gastrointestinal stromal tumours (review of NICE technology appraisal guidance 196). Costing statement. London (UK): National Institute for Health and Care Excellence (NICE); 2014 Nov. 1p. (Technology appraisal guidance; no. 326). Electronic copies: Available from the [National Institute for Health and Care Excellence \(NICE\) Web site](#) .
- Jones J, Harris P, Shepherd J, Cooper K. Imatinib for the adjuvant treatment of gastrointestinal stromal tumours. A single technology appraisal. Evidence review group report. Southampton (UK): Southampton Health Technology Assessments Centre (SHTAC); 2014. 108 p. Electronic copies: Available from the [NICE Web site](#) .

## Patient Resources

The following is available:

- Imatinib for the adjuvant treatment of gastrointestinal stromal tumours (review of NICE technology appraisal guidance 196). Information for the public. London (UK): National Institute for Health and Care Excellence (NICE); 2014 Nov. 2 p. (Technology appraisal guidance; no. 326). Electronic copies: Available from the [National Institute for Health and Care Excellence \(NICE\) Web site](#) .

Also available for download in ePub and eBook formats from the [NICE Web site](#) . Also available in Welsh from the [NICE Web site](#) .

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## NGC Status

This NGC summary was completed by ECRI Institute on March 10, 2011. This summary was updated by ECRI Institute on March 2, 2015.

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